

reflexion were not in the same planes with their Angles of incidence.

O. B. S. XI.

The Colours of the new Rings were in a contrary order to those of the former, and arose after this manner. The white round Spot of Light in the middle of the Rings continued white to the center till the distance of the incident and reflected beams at the chart was about $\frac{7}{8}$ parts of an Inch, and then it began to grow dark in the middle. And when that distance was about $1\frac{1}{16}$ of an Inch, the white Spot was become a Ring encompassing a dark round Spot which in the middle inclined to violet and indico. And the luminous Rings encompassing it were grown equal to those dark ones which in the four first Observations encompassed them, that is to say, the white Spot was grown a white Ring equal to the first of those dark Rings, and the first of those luminous Rings was now grown equal to the second of those dark ones, and the second of those luminous ones to the third of those dark ones, and so on. For the Diameters of the luminous Rings were now $1\frac{1}{16}$, $2\frac{1}{16}$, $3\frac{1}{16}$, &c. Inches.

When the distance between the incident and reflected beams of Light became a little bigger, there emerged out of the middle of the dark Spot after the indico a blue, and then out of that blue a pale green, and soon after a yellow and red. And when the Colour at the center was brightest, being between yellow and red, the bright Rings were grown equal to those Rings which in the four first Observations next encompassed them; that

that is to say, the white Spot in the middle of those Rings was now become a white Ring equal to the first of those bright Rings, and the first of those bright ones was now become equal to the second of those, and so on. For the Diameters of the white Rings, and of the other luminous Rings encompassing it, were now $1\frac{1}{16}$, $2\frac{1}{16}$, $3\frac{1}{16}$, &c. or thereabouts.

When the distance of the two beams of Light at the Chart was a little more increased, there emerged out of the middle in order after the red, a purple, a blue, a green, a yellow, and a red inclining much to purple, and when the Colour was brightest being between yellow and red, the former indico, blue, green, yellow and red, were become an Iris or Ring of Colours equal to the first of those luminous Rings which appeared in the four first Observations, and the white Ring which was now become the second of the luminous Rings was grown equal to the second of those, and the first of those which was now become the third Ring was become the third of those, and so on. For their Diameters were $1\frac{1}{16}$, $2\frac{1}{16}$, $2\frac{1}{16}$, $3\frac{1}{16}$ Inches, the distance of the two beams of Light, and the Diameter of the white Ring being $2\frac{1}{8}$ Inches.

When these two beams became more distant there emerged out of the middle of the purplish red, first a darker round Spot, and then out of the middle of that Spot a brighter. And now the former Colours (purple, blue, green, yellow, and purplish red) were become a Ring equal to the first of the bright Rings mentioned in the four first Observations, and the Ring about this Ring were grown equal to the Rings about that respectively; the distance between the two beams of

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Light